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This listing of claims will replace all prior versions of claims in the application.

Claims 1-10. (cancelled)

Claim 11. (new) A system for configuring equipment to achieve a desired result, comprising:

a simulation engine that comprises hardware and/or software that takes a desired result as an input and outputs at least one parameter setting for operating equipment to achieve a desired result;

a consumable knowledge base that comprises hardware and/or software that takes as input at least one parameter setting for operating equipment to achieve a desired result, and outputs a consumable selection for use in the equipment to achieve a desired result;

a configuration file for storing the desired result, a reference to the equipment, the at least one parameter setting and the consumable selection; and

a process step configurator, the process step configurator receiving the desired result, the at least one parameter setting and the consumable selection and outputting a step-by-step process for achieving a desired result,

wherein the system is in communication with the equipment and the system communicates the at least one parameter setting to the equipment for setting the equipment according to the at least one parameter.

Claim 12. (new) The system of claim 11, wherein the simulation engine outputs a simulation result.

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- Claim 13. (new) The system of claim 11 wherein the equipment is a wafer stepper used to produce a circuit pattern on a wafer element.
- Claim 14. (new) A method for configuring equipment to achieve a desired result, comprising the steps of:

receiving said desired result into a simulation engine;

outputting from said simulation engine at least one parameter setting for operating said equipment to achieve said desired result;

outputting a consumable selection for use in said equipment to achieve said desired result;

storing the desired result, a reference to the equipment, the at least one parameter setting and the consumable selection to a configuration file; and

outputting a step-by-step process for achieving the desired result based on the desired result, the at least one parameter setting and the consumable selection.

- Claim 15. The method of claim 14 further comprising outputting from the simulation engine a simulation result.
- Claim 16. (new) The method of claim 14 wherein the equipment is a wafer stepper used to produce a circuit pattern on a wafer element.

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Claim 17. (new) A system for configuring wafer stepper equipment to achieve a desired result, comprising:

a simulation engine that comprises hardware and/or software that takes a desired result as an input and outputs at least one parameter setting for operating equipment to achieve a desired result; and

a consumable knowledge base that comprises hardware and/or software that takes as input at least one parameter setting for operating equipment to achieve a desired result, and outputs a consumable selection for use in the equipment to achieve a desired result.

Claim 18. (new) The system of claim 17 further comprising a configuration file for storing the desired result, a reference to the equipment, the at least one parameter setting and the consumable selection.

Claim 19. (new) The system of claim 17 further comprising a process step configurator, the process step configurator receiving the desired result, the at least one parameter setting and the consumable selection and outputting a step-by-step process for achieving a desired result.

Claim 20. (new) The system of claim 17 wherein the system is in communication with the equipment and the system communicates the at least one parameter setting to the equipment for setting the equipment according to the at least one parameter.